

## ISM/EWP CONFERENCE

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### *Opening remarks and recognition of ISM accomplishments*

"I am pleased and honored to have been asked to be keynote speaker at this very important conference dedicated to making the vision of Integrated safety management a reality at the *task level*. This morning I'd like to address several topics:

- What you have accomplished to date at the task level of ISM;
- The importance of the 'I' in Integrated safety management;
- The importance of sharing lessons learned;
- New technologies for sharing lessons learned and knowledge; and
- The role EH will play in promoting these technologies.

Since coming to DOE, I have heard many accounts of the significant progress you have made in achieving ISM at the activity level. Across the country, Enhanced Work Planning processes are producing substantial improvements in safety, productivity and efficiency. Following are some of these successes:

- At Hanford's West Tank Farms, the average cycle time for work packages has decreased from 258 days to 50 days.
- At Idaho, workers' suggestions identified actions that will improve waste movement and processing performance by more than 100%.
- Oak Ridge's Work Planning and Permit Information System has dramatically improved the quality of work planning activities at that site.
- Fernald has experienced a 66% reduction in the time required to complete work activities associated with the packaging, managing, and shipping of waste.
- At Savannah River, a roll back of contaminated areas was initiated to address waste generated as a result of work activities. The results to date show that an initial investment of \$3 Million will return \$18 million per year - in one plant alone.
- Hanford's K-basin experienced a 21% reduction in personnel accidents and reportable events with a corresponding 36% increase in worker productivity
- Again at Hanford, a reduction of future illnesses and injuries has been realized through implementation of a process that targets employees for occupational health monitoring and identifies health trends across the Hanford site.
- A 86% reduction in time to complete corrective maintenance tasks while simultaneously increasing to 100% the review of all work by safety and health specialists at the Fernald site.

Although started as a EH Initiative, Enhanced Work Planning quickly evolved into a "grass roots" initiative championed by almost every site in the complex. Those sites and facilities who initially piloted it are now its champions. One only has to look at the current leadership of the National EWP Steering Committee for proof of that.

Although not mandated by any present DOE Order, the EWP process and principles are effective tools to facilitate implementation of Integrated Safety Management at the activity level. As its name implies, EWP focuses on improving how work is requested, approved, planned, executed and analyzed; the very core of ISM.

Long before ISM was embraced by the department, the EWP community was working at integrating environment and safety into work planning activities by promoting:

- Line management ownership
- A graded approach to work management, based on risk and complexity
- Worker involvement beginning at the earliest phases of work management
- Organizationally diverse teams
- And, organized, institutionalized communication.

Organized communication, the sharing of lessons learned, the sharing of knowledge. When you get right down to it, that's been the key to EWP success, and it **will be** the key to successful Departmental wide implementation of ISM.

I'll talk more about that in a moment, but let me first briefly address the "I" of ISM, Integration.

### *The "I" of ISM*

I'd like to recognize the EWP Steering Committee for its decision last year to merge their local and national efforts under the ISM banner. To the Steering Committee's credit, it recognized that ISM embraced the same elements as EWP.

In an era where programs seem to take on a life of their own, instead of demanding their own independent identity, EWP practitioners joined forces with their compatriots in the ISM ranks, and by doing that, significantly enhanced the department's progress in accomplishing ISM.

There are many other ES&H initiatives, sponsored by collaborative user communities across the complex whose knowledge and vitality are also greatly enhancing ISM:

- VPP - Established in 1994, EH's VPP effort was modeled after the successful Voluntary Protection Programs instituted by the Department of Labor. In contrast to traditional regulatory compliance assurance programs, voluntary protection programs are designed to recognize safety and health programmatic excellence. Specifically, VPP recognizes and promotes excellence in management commitment, employee involvement, worksite analysis, hazard control, and safety and health training. Thus like EWP, DOE's VPP effort melds cleanly with ISM.
- Work Smart - A systemic process developed in conjunction with the field, for addressing work hazards and controls, resulting in an agreement on the set of tailored ES&H standards that apply to an operation. Because the Work Smart Standards Program helps management address the identification of applicable site and facility wide standards, it is an effective tool for accomplishing ISM at the site level.
- ISO 14000 - As VPP provides tools for, and recognizes excellence in, worker

participation programs, ISO 14000 provides tools for, and recognizes excellence, programs and processes designed to assure and improve environmental quality.

- The Society of Effective Lessons Learned is a volunteer organization comprised of members from various DOE Programs, Operations Offices, sites, and contractors. SELLS shares the common goal of improving information exchange across the DOE complex and with other public and private organizations. SELLS is actively working to advance the goals of ISM, particularly those of "Feedback and Improvement Loops." As such, this initiative folds nicely into ISM.

These are but a few of the many collaborative efforts and programs underway across the complex focused at improving some aspect of DOE operations. I endorse any effort of individuals with common interest to join together for the sharing of knowledge and lessons learned.

To those fearful of losing their identity, you only have to look to the organizers of this conference - the National EWP Steering Committee. They are not only alive and well, but prospering as an integral process for achieving ISM at the task level.

The ISM umbrella is big enough for all. The more that join, the stronger the whole. When programs set themselves off as separate and distinct, they take away from the overall momentum of the Department's ISM effort. Joined with it however, we all move one step closer to accomplishing improved ES&H performance.

The "I" of ISM means integration of initiatives. Communities of interest such as EWP, VPP, ISO 14000 promote excellence in their specific areas, and are thus encouraged. The integration of these communities under ISM takes it one more step, assuring excellence!

Many sites represented here have successfully integrated these and other ES&H initiatives, I encourage you to share your lessons learned on how you accomplished this.

## **Sharing Lessons Learned and Knowledge**

Let me now turn my attention to the conference theme - the sharing of knowledge and lessons learned at accomplishing ISM at the activity level.

One of the key principles of ISM and EWP has been the importance of sharing of knowledge and lessons learned."

- Last year Rocky Flats, Idaho, Brookhaven, and Lawrence Berkeley worked together on tools and processes to promote Continuous Improvement Environments. The tools developed have enabled workers to improve the efficiency and safety of their work environments.
- Richland, Idaho, Rocky Flats, and Oak Ridge built upon each others Automated Job Hazard Analysis Programs, saving the department millions of dollars by preventing needless duplication of effort.
- The current criteria for defining activities that fall under 'Skill of the Craft' is the product of almost every DOE site, as is the Enhanced Work Training program.

In today's environment of shrinking budgets and changing missions, we can ill afford any

inefficiencies or missed opportunities to capitalize on lessons learned. We have to continue to find better, more cost-efficient, and safer ways to conduct our mission.

## **The EH Information Portal**

Since its inception, participants in both ISM and EWP have actively supported the use of web sites as clearing houses of information.

However, as everyone here is probably aware, the proliferation of web sites on the web has made it increasingly difficult to find the right information. In a way, we are in an 'Information Hurricane'. We have inadequate tools and systems to cull out and disseminate useful information in a timely fashion. Information can help DOE do more with less, but too much information bogs everyone down.

What is needed is a systematic process of finding, selecting, organizing, distilling and presenting information in a way that improves an employee's comprehension in a specific area of interest.

In commercial industry, this is known as 'Knowledge Management'.

The role of Knowledge Management is to connect owners of information with seekers of information. One of the principle 'tools' that drives Knowledge Management are Internet 'Portals' such as Yahoo!, MSNBC, and AOL. These 'tools' offer a wide variety of venues for individuals from across the complex to meet and collaborate on items of common interest.

Imagine the possibilities if:

- Line managers and work planners could access work packages developed at other sites for use at their own site.
- Work Planners and safety and health professionals could simply click on a hot link, and have intelligent search tools automatically seek out lessons learned across the complex.
- Worker identified improvement opportunities were automatically forwarded electronically to management, and the improvements shared with fellow managers and workers across the complex.
- One could end the endless cycle of reinventing documents already in existence at other sites.
- One could identify and access the technical capability of experts across the complex.

Imagine getting the right information, when you need it!

As I noted earlier, over the past several years, much has been done to post ISM/EWP related documents on web sites. However, a vast majority of the wealth of DOE knowledge is locked behind site firewalls, available to only a select few who know of it or have access to it.

Over the past several years, EH has been aggressively developing its information infrastructure. Taking advantage of the synergy created by the strong DOE commitment to implement ISM and the availability of computer network technology and the Internet, EH has developed an automated system that allows unprecedented opportunities to extract and organize ES&H information across the DOE complex.

The system permits an authorized user to extract ES&H information, which may reside behind a

site's firewall, and to cross-reference and display it in an ISM framework. Each site can set the criteria on data access, ensuring that security of other information and of the site's network is maintained.

How it works:

- The new ES&H information highway is a web-based tool that securely delivers a site's internal ES&H information to external users via the Internet. The system takes unrelated data sources, such as web documents, word processing files, and databases, and categorizes them according to the ISM framework, storing the results on a 'ES&H Knowledge' server.
- Users access information with a web browser, such as Netscape or Internet Explorer, without ever connecting directly to the actual data sources.
- With the aid of what is best described as 'Universal Translators', it is not necessary for sites to change how they manage or organize ES&H information.
- When a user clicks on a link, the 'ES&H Knowledge' server retrieves the information on the users behalf. As a result, the user never communicates directly with the actual source.

While currently only in use now by EH's Office of Oversight, this new process will form the backbone of new EH efforts at improving the sharing of information and lessons learned across the complex.

Access to authorized users will be through the new ES&H information Portal. The portal will provide:

- Access to information from servers across the DOE complex
- Forums where interested parties can share knowledge and lessons learned on ISM program development, implementation lesson learned, work planning initiatives, worker involvement tools, and performance indicators.
- A searchable knowledge base which would allow users to quickly access other sites' documents. Currently, workers have access to only documents actually residing on their own or EH servers.

In addition to search tools, the new portal, through the "myES&H!" will also offer users the opportunity to pre-identify information of interest to them, and have it automatically sent to them whenever and wherever it is placed on the net.

Not very far down the road, the computerized work planning tools can be 'hot key linked' to the ES&H Knowledge server, allowing work planners to access and download existing work planning material and ES&H information, including work packages and lessons learned - a seamless integration of work planning and ES&H.

### *Closing Comments*

"In closing, let me commend those of you who have contributed to the progress at achieving ISM at the task level. The goal of ISM is to foster the successful accomplishment of DOE's objective - to do work safely. To meet this objective, I encourage you to share your experiences and,

knowledge with each other and to continue to move forward.

If the sharing of lessons learned accomplishes little more than sparing us from reinventing the wheel, its value to the DOE will be measured in the hundreds of millions of dollars.

More importantly, and much more probably, the sharing of information will help each of you to more readily and safely accomplish the tasks ahead of you. In doing so, we will be able to show our workers, the Congress, and the American public that we are worthy of their trust.

Enjoy the conference, and share your knowledge!